

ABSTRACT OF THE DISCLOSURE

A method for building a network route map is described in which network operational characteristics are gathered by actively probing multiple network routes, and building the network route map based on the operational characteristics. Route maps are generated which
5 provide a view of the network from the perspective of a particular routing device in the network. Embodiments include methods for gathering the operational data by transmitting one or more data packets, receiving responses thereto, and determining time differentials based on the responses. Other embodiments include methods for processing the operational data to determine various metrics, and normalizing the data with similar data gathered from
10 other network route probes. Finally, additional embodiments include propagation of the preferred route information to multiple routing devices to provide intelligent route selection thereto.